

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:

A1 (11) International Publication Number:

WO 99/64892

....

(43) International Publication Date:

16 December 1999 (16.12.99)

(21) International Application Number:

PCT/IB99/01002

(22) International Filing Date:

3 June 1999 (03.06.99)

(30) Priority Data:

9812341.7

G01T 1/26

8 June 1998 (08.06.98)

GB

(71) Applicant (for all designated States except US): DE BEERS INDUSTRIAL DIAMOND DIVISION (PROPRIETARY) LIMITED [Z.A/ZA]; SEO Building, Comer Crownwood & Booysens Reserve Roads, Theta, 2001 JOHANNESBURG (ZA).

(72) Inventors; and

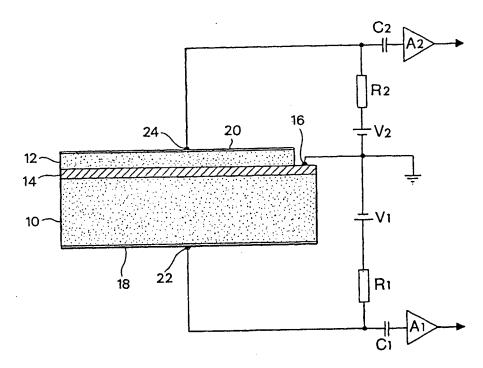
- (75) Inventors/Applicants (for US only): SUSSMANN, Ricardo, Simon [GB/GB]; 5 Arborfield Court, Swallowfield Road, Arborfield Cross, Reading, Berkshire RG2 9JS (GB). SCARS-BROOK, Geoffrey, Alan [GB/GB]; 40 Cavendish Mead, Sunninghill, Ascot, Berkshire SL5 9TD (GB). STEWART, Andrew, David, Garry [GB/GB]; The Old Rectory, Ashampstead, Reading, Berkshire RG8 8SH (GB).
- (74) Agents: GILSON, David, Grant et al.; Spoor and Fisher, P.O. Box 41312, 2024 Craighall (ZA).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: DETECTOR FOR IONISING RADIATION



(57) Abstract

A detector for ionising radiation comprises first (10) and second (12) diamond detector elements which are connected to a common contact (14). The two detector elements are of differing thickness and are optimised for the detection of different types of radiation, so that the detector simultaneously provides two output signals indicative of different kinds of radiation incident on the detector.